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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,728	07/21/2006	Noriyuki Kunishi	293517US0PCT	6528
22850	7590	08/06/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BOYKIN, TERRESSA M	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			08/06/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/586,728	Applicant(s) KUNISHI ET AL.	
	Examiner Terressa M. Boykin	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4-1-08; 7-21-06</u> . | 6) <input type="checkbox"/> Other: _____ |

35 U.S.C. 103(a) Obviousness Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1- 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5047497 see abstract, cols. 1- 9 and claim 1.

USP 5047497 discloses a process for producing an aromatic polycarbonate in a water-in-oil emulsified form, having an improved heat stability during molding at a high temperature, is described. In the process according to the present invention, a tertiary amine is added to the water-to-oil emulsion after the average diameter of liquid droplets of the water phase is reduced to not more than 10.mu.m. The polycarbonate obtained by the process of the present invention is improved in heat stability and can provide a molded article with less coloration.

Although the primary focus of the reference is not purification of the emulsion but that of heat stabilization the reference does recognize and mention specifically that the coalescing of the emulsion would separate the impurities. Note particularly col. 7 lines 33-46 states:

“Then, the tertiary amine is added to the emulsion, however, there is no particular restriction for the mixing and stirring method upon adding the tertiary amine and it may be added to the emulsion of a high emulsified state just after passing through the emulsifying equipment. However, for promoting the coalescence of the highly emulsified emulsion and improving the liquid separating in the impurity removing step, it is preferred to employ more moderate mixing and stirring condition as compared with the specific condition of high speed employed before the addition of the tertiary amine. Specifically, a general condition usually employed in production of polycarbonate is fully adequate for the purpose.”

While it is true that In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) states that the “mere fact” that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination, that does not mean that “desirability” is a general pre-requisite to obviousness. There are in fact three possible sources for “motivation” to combine references: a) the nature of the problem to be solved; b) the teachings of the prior art; and c) the knowledge of persons of ordinary skill in the art. See MPEP 2143.01.

“Desirability” applies only to source “b”); it is the strongest form of motivation, but not the only one. See MPEP 2144 [R-5]. As outlined therein, the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; it may be reasoned from knowledge generally available to one of

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ordinary skill in the art, established scientific principles, or legal precedent established by prior case law.

Thus, if the facts in a prior legal decision are sufficiently similar to those in an application under examination, the examiner may use the rationale used by the court. Examples directed to “various common practices” which the court has held normally require only ordinary skill in the art and hence are considered “routine expedients” See MPEP 2144.04

Thus, in the instant case, since a **Coalescer** is well known in the art as a technological device for performing coalescence, i.e. its primary use: to separate emulsions in various processes. And since the reference states in col. 7 that there is no restriction on the mixing or stirring method or the type of emulsifying equipment except that more moderate mixing and stirring conditions should be applied in promotion of coalescence thus recognizing its significance in removing impurities.

It would have been obvious for one of ordinary skill in the art to use a coalescer to for the emulsion since, it is prima facie obvious to select a known equipment for use in a process based on its recognized suitability for its intended purpose. See Sinclair & Carroll Co. v. Interchemical Corp., 325 US 327, 65 USPQ 297 (1945).

Basically Coalescer works as reversed emulsifier and would have been obvious to the skilled

artisan to use such a device to separate the two phases. The fact that the content of impurities would be reduced as claimed would have been inherent in the reference.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terressa Boykin whose telephone number is (571) 272- 1069 . The examiner can normally be reached at (571) 272-0580 on Monday through Friday from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck , can be reached at (571) 272- 1078 . The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/Terressa M. Boykin/
Primary Examiner, Art Unit 1796**